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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,302	01/29/2004	Don M. Buckner		4984

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EXAMINER

SNIDER, THERESA T

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/767,302	Applicant(s) BUCKNER, DON M.	
	Examiner Theresa T. Snider	Art Unit 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/29/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the 'two or more' boom arms(claim 2) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because:

Figure 1, 'flexable' should be replaced with 'flexible;

'9' is disclosed as a 'flexable connection' however page 8, line 12 discloses it as a 'vacuum conduit';

‘turrent’ should be replaced with ‘turret’;

‘container’ should be replaced with ‘tank’ to correspond with #1 ‘vacuum tank’.

Figures 2-3, ‘container’ should be replaced with ‘tank’ to correspond with ‘vacuum tank’.

Figure 3, ‘fastner’ should be replaced with ‘fastener’.

Figure 4, ‘flexable’ should be replaced with ‘flexible’;

‘container’ should be replaced with ‘tank’ to correspond with #1 ‘vacuum tank’;

‘turrent’ should be replaced with ‘turret’.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 20(figure 3). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the specification fails to disclose there being two or more boom arms (claim 2).
5. The abstract of the disclosure is objected to because of the inclusion of legal phraseology; line 9 'said' and lines 9, 14 and 17, 'means'. Correction is required. See MPEP § 608.01(b).
6. The disclosure is objected to because of the following informalities:
- Exemplary of such:
- Page 2, line 13, 'actuators' should be replaced with 'actuator'.

Page 3, lines and 9, 'Said' should be replaced with 'The';

Line 9, 'means to provide' should be deleted;

Line 14, 'actuators' should be replaced with 'actuator'.

Page 5, line 11, 'assembly' should be replaced with 'assembly';

Line 11, '1' should be deleted;

Lines 11-21, 'The self-contained...shown' should be deleted or inserted into the specification. The brief description of the drawings should be 'brief'.;

Lines 25-26, 'A Vacuum...Vacuum' should be deleted or inserted into the specification.

Page 6, lines 5-15, 'Container...Container 1.' shown' should be deleted or inserted into the specification. The brief description of the drawings should be 'brief'.;

Lines 18-19, 'The Float...10.' shown' should be deleted or inserted into the specification. The brief description of the drawings should be 'brief'.;

Lines 22-26, 'In prior...hose' shown' should be deleted or inserted into the specification. The brief description of the drawings should be 'brief'.

Page 7, lines 9 and 10, 'Said' should be replaced with 'The';

Line 15, 'actuators' should be replaced with 'actuator'.

Page 8, lines 9-10, 'as a cross...container 1' should be deleted;

Lines 10 and occurrences thereafter, 'vacuum container' should be replaced with 'vacuum tank' to correspond with figures 1 and 4;

Lines 22-23, 'for mounting the Boom Assembly to.' is missing a phrase;

Line 23, it is unclear as to what is meant by a 'man-way';

Line 26, 'Turrent' should be replaced with 'Turret'.

Page 9, lines 5-6, it is unclear as to what is meant by 'and articulating boom';

Line 15, 'extended' should be replaced with 'extend'.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 1, line 1, discloses a 'powered vacuum boom' however the body of the claim(after 'having') merely recites an actuator and fails to disclose any boom or vacuum structure;

Line 1, 'having' should be replaced with 'comprising';

Line 2, is the battery meant by to be positively recited in the claim? If yes, 'a battery to power' should be inserted after 'and' and 'is powered by a battery' should be deleted.

Claim 2, line 1, 'means described in' should be replaced with 'boom of';

Line 1, it is unclear as to the structural relationship of the arms to the previously recited elements of claim 1.

Claim 3, line 1, 'means described in' should be replaced with 'boom of';

Line 1, 'having' should be replaced with 'wherein';

Line 1, 'is' should be inserted after 'battery'.

Claim 4, line 1, 'means described in' should be replaced with 'boom of';

Line 1, 'having' should be replaced with 'further comprising';

Line 2, it is unclear as to whether the battery is in addition that of claim 1 or one in the same.

Claim 5, it is unclear as to what is being claimed. This claim will NOT be treated on the merits because it is not clear as to what Applicant intends to claim.

Line 1, 'said boom' lacks proper antecedent basis;

Line 1, 'the full tank vacuum shut off valve' lacks proper antecedent basis.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Layton.

Layton discloses a linear actuator powered by a battery (col. 2, lines 11-12 and 15-20).

With respect to claim 2, Layton discloses two or more linear actuated boom arms (fig. 2, #34,56,57).

11. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Johnson.

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Johnson discloses a linear actuator powered by a battery (fig. 1, #202,224 and fig. 5, #162).

With respect to claim 2, Johnson discloses two or more linear actuated boom arms (fig. 1, #162,186).

With respect to claim 3, Johnson discloses a battery mounted on the boom (fig. 2, #162,154).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson as applied to claim 1 above, and further in view of Lybecker.

Johnson discloses a similar boom however fails to disclose a solar battery charger.

Lybecker discloses a linear actuator powered by a battery with a solar battery charger (fig. 1, #32 and col. 4, lines 23-26). It would have been obvious to one of ordinary skill in the art to provide the solar battery charger of Lybecker in Johnson to ensure that the battery has sufficient charge when working on a job and wouldn't require use of an electrical source.

Conclusion

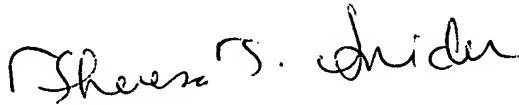
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Daneman discloses a vacuum boom. Stilwell and Buckner et al. disclose a linear actuator for a boom.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Friday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in cursive script, appearing to read "Theresa T. Snider".

Theresa T. Snider
Primary Examiner
Art Unit 1744

8/28/06